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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/730,476	12/08/2003	Chunying Du	C065272/0209910	3329

7590 07/09/2008

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EXAMINER	
ROBINSON, HOPE A	
ART UNIT	PAPER NUMBER
1652	

MAIL DATE	DELIVERY MODE
07/09/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/730,476	DU ET AL.	
	Examiner	Art Unit	
	HOPE A. ROBINSON	1652	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *19 December 2007*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-19,22,23,26,30-32,38-42,49-70 and 72-96* is/are pending in the application.

4a) Of the above claim(s) *1-16, 22-23, 26, 30-32, 38-42, 49-70, 72-86 and 88-96* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *17-19 and 87* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Application Status

1. Applicant's response to the office action mailed April 11, 2007 on December 19, 2007 is acknowledged.

Claim Disposition

2. Claims 1-19, 22-23, 26, 30-32, 38-42, 49-70, 72-96 are pending. Claims 17-19 and 87 are under examination. Claims 1-16, 22-23, 26, 30-32, 38-42, 49-70, 72-86 and 88-96 are withdrawn from further consideration pursuant to 37 CFR 1.12(b), as being drawn to a non-elected invention, there being no allowable generic or linking claim. The claims are only being examined to the extent that they pertain to the elected invention, SEQ ID NO:45.

Maintained-Sequence Compliance Objection

3. This application contains sequence disclosures that are encompassed by the definitions for nucleotide and/or amino acid sequences set forth in 37 CFR 1.821(a)(1) and (a)(2). However, this application fails to comply with the requirements of 37 CFR1.821 through 1.825; applicant's attention is directed to the final rule making notice published at 55 FR 18230 (May 1, 1990), and 1114 OG 29 (May 15, 1990). To be in

compliance, applicant is required to identify all amino acid sequences of at least 4 L-amino acids and at least 10 nucleotides by a sequence identifier, i.e., "SEQ ID NO:". The specification discloses sequences that have not been identified by a sequence identifier, see for example, page 14: Fig. 5B "ASQRLFPG" for example and "AVPS"; and page 15: Fig. 7C "DEVD", (and throughout the specification). If these sequences have not been disclosed in the computer readable form of the sequence listing and the paper copy thereof, applicant must provide a computer readable form of the "Sequence Listing" including these sequences, a paper copy of the "Sequence Listing", as well as an amendment directing its entry into the specification, and a statement that the content of the paper and computer readable form copies are the same and, where applicable, include no new matter as required by 37 CFR 1.821(e) or 1.821(f) or 1.821(g) or 1.821(b) or 1.825(d). See the attached Notice to Comply with the sequence rules.

In addition, the sequence statement, affirms that the content of the sequence listing information in the CRF is identical to the paper copy of the sequence listing, however, does not indicate that, where applicable, "includes no new matter". Therefore, the instant application fails to fully comply with the sequence rules. A signed statement regarding no new matter is required.

Claim Objection

4. Claim 17 is objected to because of the following informalities:

For clarity and precision of claim language it is suggested that Claim 17 amended to read, “An isolated polypeptide for cleaving an inhibitor of apoptosis (IAP), which consists essentially of the variant Omi set forth in SEQ ID NO:45".

Correction is required.

Maintained-Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 17-19 are rejected under 35 U.S.C. 102(b) as being anticipated by Smithlkine Beecham PLC (EP828003 A2, March 11, 1998).

The reference teaches a protein structure that is 99.9% identical to the claimed SEQ ID NO:45 (variant Omi), see the alignment. Therefore, the limitations of the claims are met by the reference.

Response to Arguments

6. The response filed has been considered in full. Applicant's traverse the rejection under 35 U.S.C. 102 stating that all the limitations are not met. Applicant's also ask for guidance as to where the sequence is. Note that the alignment has been copied directly

into the office action below. In addition, the claim is to a variant protein (SEQ ID NO:45) and the cited reference teaches a structure that is 99.9% identical (reference sequence 458) to the claimed SEQ ID NO:45. Based on the sequence similarity, the claimed activity is an inherent property. A variant means that something has changed in the structure and 99.9% means just that. Thus applicant's arguments are not deemed persuasive. All other rejetctions and objections have been withdrawn. Applicant's comments regarding DEVD are noted, however the specification does not have the spelled out meaning in the first occurrence or separate each letter by a comma. Thus, it appears as the 4-letter sequence needs a "SEQ ID NO: "(based on the sequence rules). Applicant is urged to amend the specification.

Conclusion

7. No claims are allowable.

8. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hope A. Robinson whose telephone number is 571-272-0957. The examiner can normally be reached on Monday-Friday.
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nashaat Nashed, can be reached at (571) 272-0934. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Hope A. Robinson/

Primary Examiner, Art Unit 1652

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RESULT 6
AAW56769
ID   AAW56769 standard; protein; 458 AA.
XX
AC   AAW56769;
XX
DT   13-OCT-1998  (first entry)
XX
DE   Homo sapiens PSP1.
XX
KW   PS-1; presenilin; presenilin-1; PSP-1; Alzheimer's disease;
KW   serine protease; neurodegeneration; predisposition; diagnosis.
XX
OS   Homo sapiens.
XX
PN   EP828003-A2.
XX
PD   11-MAR-1998.
XX
PF   26-AUG-1997;   97EP-0030650l.
XX
PR   06-SEP-1996;   96US-0025436P.
PR   25-OCT-1996;   96US-0027873P.
PR   13-DEC-1996;   96US-0032875P.
XX
PA   (SMIK ) SMITHKLINE BEECHAM PLC.
PA   (SMIK ) SMITHKLINE BEECHAM CORP.
XX
PI   Karran EH,  Clinkenbeard HE,  Browne MJ,  Southan CD,  Creasy CL;
PI   Livi GP;
XX
DR   WPI; 1998-161101/15.
DR   N-PSDB; AAV29524.
XX
PT   Nucleic acids encoding human serum protease protein(s) - used for
PT   diagnosing pre-disposition to Alzheimer's disease, etc.
XX
PS   Example 2; Page 23-24; 65pp; English.
XX
CC   The sequence is that of the serine protease PSP1 which can be used to
CC   identify modulators of serine protease activity and also to diagnose a
CC   condition associated with lack of one of the serine proteases or a
CC   genetic predisposition to neurodegeneration in a patient, preferably
CC   predisposition to Alzheimer's disease
XX
SQ   Sequence 458 AA;

  Query Match             99.9%;  Score 1604;  DB 2;  Length 458;
  Best Local Similarity   99.1%;  Pred. No. 2.3e-154;
  Matches  322;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;
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Qy          1 AVPSPPPASPRSQYNFIADVVEKTAPAVVYIEILDRHPFLGREVPISNGSGFVVAADGLI 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        134 AVPSPPPASPRSQYNFIADVVEKTAPAVVYIEILDRHPFLGREVPISNGSGFVVAADGLI 193

Qy         61 VTNAXVVADRRRVRVRLLSGDTYEAVVTAVDPVAXIATLRIQTKEPLPTLPLGRSADVRQ 120
              |||| |||||||||||||||||||||||||| |||||||||||||||||||||||||||
Db        194 VTNAHVVADRRRVRVRLLSGDTYEAVVTAVDPVADIATLRIQTKEPLPTLPLGRSADVRQ 253

Qy        121 GEFVVAMGSPFALQNTITSGIVSSAQRPARDLGLPQTNVEYIQTDAAIDFGNXGGPLVNL 180
              |||||||||||||||||||||||||||||||||||||||||||||||||| |||||||
Db        254 GEFVVAMGSPFALQNTITSGIVSSAQRPARDLGLPQTNVEYIQTDAAIDFGNSGGPLVNL 313

Qy        181 DGEVIGVNTMKVTAGISFAIPSDRLREFLHRGEKKNSSSGISGSQRRYIGVMMLTLSPSI 240
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        314 DGEVIGVNTMKVTAGISFAIPSDRLREFLHRGEKKNSSSGISGSQRRYIGVMMLTLSPSI 373

Qy        241 LAELQLREPSFPDVQHGVLIHKVILGSPAHRAGLRPGDVILAIGEQMVQNAEDVYEAVRT 300
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        374 LAELQLREPSFPDVQHGVLIHKVILGSPAHRAGLRPGDVILAIGEQMVQNAEDVYEAVRT 433

Qy        301 QSQLAVQIRRGRETLTLYVTPEVTE 325
              |||||||||||||||||||||||||
Db        434 QSQLAVQIRRGRETLTLYVTPEVTE 458
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